## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES DEPARTMENT OF AGRICULTURE CURRENT CARRENT RECORD AGRICULTURAL RESEARCH ADMINISTRATION BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

U. S. DEPART JENS IV AS MOULTURE

INSECT PEST SURVEY

Special Supplement

September 15, 1943

HESSIAN FLY SURVEY AT HARVESTTIME 1943

Summarized by W. B. Cartwright Division of Cereal and Forage Insect Investigations Bureau of Entomology and Plant Quarantine Agricultural Research Administration

Field surveys made by the Bureau of Entomology and Plant Quarantine at Sacramento, Calif.; Manhattan, Kans.; Lafayette, Ind.; and Beltsville, Md., and by the State Agricultural Experiment Stations or agencies of Nebraska, Oklahoma, Iowa, Missouri, Illinois, Ohio, New York, and Pennsylvania indicate that hessian fly infestations are low throughout the winter Wheat Belt with exceptions of moderate to heavy infestations in the Sacramento Valley and south-central coastal counties of California, south-central and southeastern Nebraska, northcentral, south-central, and northeastern Kansas, east-central Kentucky, western New York, eastern Pennsylvania, New Jersey, western South Carolina, and northeastern Georgia. The surveys show, however, that there are menacing populations of hessian flies in local fields and areas in all of the winter Wheat Belt States. For this reason, and because of the war-time need of utilizing every available means of increasing the wheat crop, it is advisable to continue to observe the safe-seeding dates and recommended controls for the fly rather than to hazard the chance of a rapid multiplication of the fly during the season with resultant widespread injury to the 1944 wheat crop.

The data summarized in the following table, and the accompanying map, indicate more fully the regions covered by the survey and the general trend of fly infestations. A field sample in the survey usually consisted of 50 wheat stems.

## Hessian fly survey at harvesttime 1943

| Area                      | Fields: Stems infested |                                  |                            |                  |  |
|---------------------------|------------------------|----------------------------------|----------------------------|------------------|--|
|                           |                        | Average:                         |                            |                  |  |
| California                | Number:                | Percent : 24.8                   | Percent 100                | Percent 0        |  |
| Colorado:<br>Northeastern | 18                     | 2.3                              | 16                         | . 0              |  |
| Nebraska: 1/ Northern     | 43 : 43 : 32 : 23      | .14<br>2.8<br>8.3<br>8.1         | -<br>16<br>22              | -<br>0<br>0      |  |
| Kansas:Western            | 84 :<br>57 :           | 1.7<br>9.2<br>8.1<br>12.1<br>3.5 | 30<br>46<br>46<br>46<br>74 | 0<br>0<br>0<br>0 |  |
| Oklahoma:1/<br>Northern   | 121                    | 3.7                              | 28                         | 0                |  |
| Iowa <u>l</u> /           | 81                     | 1.4                              | 16                         | 0                |  |
| Missouri <u>1</u> /       | 357                    | 4.0                              | 78                         | 0                |  |
| Arkansas:<br>Northern     | 27 `                   | 3.3                              | 32                         | 0                |  |
| Jllinois 1/               | 181                    | 2.4                              | 40                         | . 0              |  |
| Michigan:<br>Southern     | 90.                    | 3.0                              | 44                         | 0                |  |
| Indiana                   | 460                    | 5.1                              | 70                         | 0 1              |  |
| Ohio 1/                   | 298                    | 4.3                              | 62                         | 0                |  |

Hessian fly survey at harvesttime 1943--Continued.

|  | Fields: Stems infested          |            |  |         |  |
|--|---------------------------------|------------|--|---------|--|
| Area   |                                 |            | Maximum :  |         |  |
|  | Number:                         | Percent :  | Percent:   | Percent |  |
| Kentucky: 1/ Western East-central  |                                 | 4.5        | <b>1</b> 2 40  | 0       |  |
| Tennessee: West-central Eastern  |                                 | 4.4<br>1.7 | 34<br>18   | 0       |  |
| New York: 1/<br>Western  | 48                              | 9.0        | 62   | 0       |  |
| Pennsylvania: 1/ Western   |                                 | 6.0<br>9.0 | 48<br>80   | 0 0     |  |
| New Jersey   | 22                              | 13.0       | 48   | 0       |  |
| Delaware   | 15                              | 5.0        | 30   | 0       |  |
| Maryland   | 58                              | 7.0        | 30   | 0       |  |
| West Virginia: Northern  | 14                              | 3.3        | 20   | 0       |  |
| Virginia   | 151                             | 4.0        | 80   | C       |  |
| North Carolina:  | 92                              | 4.0        | 24   | C       |  |
| South Carolina:  | 40                              | 8.0        | 44   | 0       |  |
| Georgia: Northeastern  | 40                              | 9.0        | 56   | 0       |  |
| Control of the Contro | The second second second second |            | A SE STORY SECTION OF THE SECTION OF |         |  |

<sup>1/</sup> In cooperation with State entomologists.



